



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,266	06/01/2006	Takahisa Ozawa	060426	3158
21874	7590	04/04/2008		
EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER GINSBERG, OREN ISAAC	
			ART UNIT 3764	PAPER NUMBER
			MAIL DATE 04/04/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,266

Applicant(s)

OZAWA ET AL.

Examiner

OREN GINSBERG

Art Unit

3764

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on papers through 27 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Oath/Declaration

In response to applicant's argument filed 27 February 2008 regarding the defective oath, examiner's objection to the oath has been withdrawn.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halsted 3,480 in view of Hoshino 2002/1063231.

Regarding claims 1-3, 5, 6, 11, Halsted discloses an exercise device comprising a base fixed in place A, a support portion E configured to support at least a part of the user's body weight acting on the leg, a coupling mechanism a, H, F configured to

movably couple the support portion to the base such that the load acted on the leg by the user's own weight varies according to a relative positional displacement between foot position A and a position of the center of gravity of the user (page 1 column 1 lines 12-41), wherein configured to limit a movable direction of the support portion such that a direction of the relative positional displacement between the foot position and the position of center of gravity is limited to a direction of flexion and extension of the knee joint (page 8 column 2 lines 61-66), and the saddle E supports the user's buttocks.

Halsted teaches the invention as claimed and as discussed above with the exception of the following claimed limitations as taught by Hoshino: the saddle has a pair of curved recessed 14, 15 at its outer periphery configured that the femoral region of the user fit the recesses, the curved recesses are configured such that the open angle between the user's leg substantially corresponds to flexion and extension of the knee joints (figures 8, 9), the curved recesses are configured such that an open angle between the user's legs is in a range of 30-70 degrees (figure 8), A first bump formed at the forward side (as seen next to stitchings 36 at the front of the saddle in figure 1), a second bump formed at the rearward side 19, wherein the curved recesses are provided between the first and second bump (figure 1), a forward position of the saddle (as seen next to 14, 15 at the front of the saddle in figure 1) is positioned to be lower than a saddle center position with the curved recesses, and a rearward portion of the saddle 19 is positioned to be higher than the saddle center portion.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Halsted in view of Hoshino in order to place the user's center of

gravity directly over the seat to make the seat more comfortable and reduce aches and pains from sitting in the saddle for prolonged periods, as taught by Hoshino (paragraphs 0002, 0009).

Regarding claim 4, Halsted in view of Hoshino teaches the invention as claimed and as discussed above with the exception of the following claimed limitations: the curved recesses are configured such that an inclination angle of the femoral region of the user relative to a vertical direction is in a range of 30-50 degrees under the condition.

However, it has been held in *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." See in MPEP 2144.05 II.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Halsted in view of Hoshino and further in view of Lu 6,189,908.

Halsted in view of Hoshino teaches the invention as claimed and as discussed above with the exception of the following claimed limitations as taught by Lu: a backrest detachably attached to a rear portion of the saddle (figure 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Halsted in view of Hoshino and further in view of Lu in order to accommodate the back when aching, as taught by Lu (column 1 lines 20-21).

Claims 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halsted in view of Hoshino and further in view of Bavaresco 6,357,825.

Halsted in view of Hoshino teaches the invention as claimed and as discussed above with the exception of the following claimed limitations as taught by Bavaresco: a saddle-length adjuster 10, 11, 12, 18", 19" (figures 1, 2, 7), and a saddle-angle adjuster 10, 11, 12, 18", 19" (figures 1,2, 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Halsted in view of Hoshino and further in view of Bavaresco in order to reduce stress to the buttocks and backbone, as taught by Bavaresco (column 2 lines 40-50).

Claims 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halsted in view of Hoshino and further in view of Jamieson 608,682.

Halsted in view of Hoshino teaches the invention as claimed and as discussed above with the exception of the following claimed limitations as taught by Jamieson: a saddle-width adjuster 12, 15 (by sliding the seat outward along rail 12 as seen by the dotted lines in figure 1) and a saddle-length adjuster 14, 15 (by sliding one of the sections forward thereby making the overall length of seat longer).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Halsted in view of Hoshino and further in view of Jamieson in order to adjust the seat to the most comfortable position for the user, as taught by Jamieson (column 1 lines 12-21).

Response to Arguments

Applicant's arguments filed 27 February 2008 have been fully considered but they are not persuasive.

Applicant argues that "Neither Halsted nor Hoshino teaches a support portion that can be moved back and forth and around in an oscillating manner. In particular, claim 1 recites a coupling mechanism configured such that a load acted a user's legs by her own weight varies according to a relative positional displacement of her feet and center of gravity. Contrary to the Examiner's assertion that Halsted discloses the claimed coupling mechanism, Halsted's coupling mechanism moves the seat (saddle) mounted on a support portion only in an up and down direction. That is, the user is only moved in an up-down movement and, consequently, as can be seen in Figures 1 and 2 of Halsted, the positional relationship between the user's feet and center of gravity is kept constant. That is, the limited up-down movement of the seat of Halsted fails to vary the load acted on the user's leg by her own weight. Claim 1 further defines a coupling mechanism configured to limit the direction of the positional displacement of the user's feet relative to her center of gravity to a direction of flexion and extension of her knee joints."

According to The Merriam-Webster Dictionary, oscillate is defined as:

Oscillate

Function: *verb*

1b: to move or travel back and forth between two points

Halsted teaches a chair that moves up and down and oscillates between two points; a lowered and an elevated point. Halsted further teaches the chair only moves in a direction such that the load on the user's leg varies and positional displacement of the knee between flexion and extension of the joint. See figure 1 below for visual demonstration how this is the case.

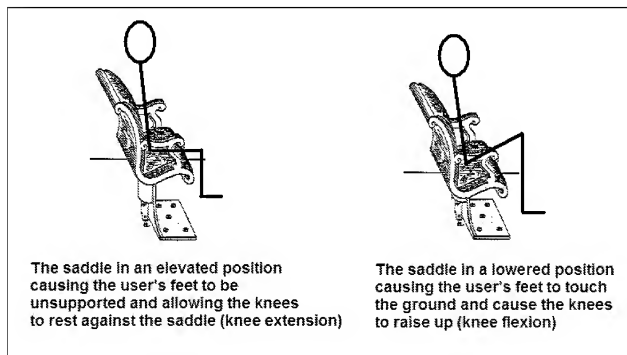


Figure 1: Visual demonstration of how the Halsted apparatus causes the user's own weight to act on their legs when the saddle oscillates up and down.

When the saddle is in an elevated position, the knee is experiencing an increased load from gravity acting on the lower leg (calf, ankle, etc.). When the chair is lowered and the user's feet are resting on the ground, this takes the pressure off the user's knee experienced from the weight of the lower leg.

Applicant further argues that "Furthermore, not only is Halsted directed to a simple up-down movement, Figure 3 of Halsted teaches away from the claimed invention. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference..., would be led in a direction divergent from the path that was taken by the applicant." In *re Gurley*, 27 F.3d 551,553 (Fed. Cir. 1994); *Gillette Co., v. S.C. Johnson & Son, Inc.*, 919 F.2d 720 (Fed. Cir. 1990) (finding that the closest prior art reference "would likely discourage the art worker from attempting the substitution suggested by [the inventor]"). Figure 3 shows a carousel ride, which is mounted on a rotatable disk-like floor. The user on the carousel ride enjoys a horse-riding feeling by the simultaneous movement of the carousel ride in an up and down direction and the rotation of the disk-like floor. However, should the carousel ride also oscillate in a back and forth direction so as to vary the load acted on the user's legs by her own weight, as in the claimed invention, the user may fall from the moving carousel ride, potentially resulting in serious injury. Therefore, not only does Halsted fail to disclose the claimed oscillating movement, it teaches away from movement that would change the load acted on the user's legs as recited in claim 1."

Examiner acknowledges applicant's point regarding the embodiment with the carousel (figure 3). However, the examiner relied upon figure 1 for the rejection, which is a teaching for a seat that oscillates up and down on a stationary base.

Applicant further argues that "Lu has been cited for disclosing a detachable backrest. Contrary to the Examiner's assertion, however, the backrest of Lu is fastened to and detachable from a seat tube 112, not the saddle. Therefore, Lu fails to teach or suggest the saddle recited in claim 7."

According to www.dictionary.com, attach is defined as:

Attach

Function: **verb**

1: to fasten or affix; join; **connect**.

As seen in figure 1, the backrest is connected to the saddle.

Applicant further argues that "Bavaresco has been cited for disclosing a saddle-length adjuster and a saddle-angle adjuster. Contrary to the claimed invention, however, Bavaresco merely teaches a saddle with two widthwise sections wherein the front portion folds down, thereby shortening the saddle length and adjusting the saddle inclination. As a result, however, in a shortened state, the front portion of the saddle cannot provide support to the user's buttocks. Therefore, Bavaresco fails to teach or suggest the saddle recited in claims 8 and 10."

When the front portion of the Bavaresco saddle is folded down, this causes the total length of the saddle supporting the user in the horizontal direction to decrease. Further, when the front portion is folded downward, this changes what is defined as the

front portion and rear portion of the saddle. As a result, this changes the length of the saddle in the forward and rearward direction.

Applicant further argues that “Jamieson has been cited for disclosing a saddle-length adjuster and a saddle-width adjuster. Contrary to the claimed invention, however, Jamieson merely teaches a saddle with two lengthwise sections wherein the saddle sections can be moved forward, backward, or sideways. In Jamieson, the saddle length cannot be elongated while maintaining the symmetry of the saddle. That is, the only way Jamieson's saddle can be lengthened is to move one section backward and the other section forward, resulting in an asymmetrical saddle. Therefore, Jamieson fails to teach or suggest the saddle recited in claims 8 and 9.”

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the saddle length adjustment mechanism maintains the saddle symmetry) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3764

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OREN GINSBERG whose telephone number is (571) 270-3074. The examiner can normally be reached on Mon-Fri, alternate Fri off, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LoAn Thanh can be reached on (571) 272-4966. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3764

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. G./
Examiner, Art Unit 3764

/LoAn H. Thanh/
Supervisory Patent Examiner, Art Unit 3764